

**Amendments to the Specification:**

Please replace the paragraph beginning at page 34, line 23, which starts with "Oct4 RT-PCR was performed as previously described (18) using modified primers" with the following amended paragraph:

Oct4 RT-PCR was performed as previously described (18) using modified primers: SEQ ID NO:1 5'-GTTCTCTTTGGAAAGGTGTTC-3' (forward) and SEQ ID NO:2 5'-ACTCGAACCACATCCTTCTC-3' (reverse) where the anticipated Oct4 RT/PCR product size was 311bp. As a control for mRNA quality we assayed polyA transcripts using the same RT-PCR conditions and the following primers: SEQ ID NO:3 5'-GTTGCAGGGTAACCGATGAA-3' (forward) and SEQ ID NO:4 5'-TGTTGTGGGTATGCTGGTGT-3' (reverse) and the anticipated product size was 361bp.

Please replace the paragraph beginning at page 35, line 2, which starts with "Standard G-banding techniques were used for karyotyping" with the following amended paragraph:

Standard G-banding techniques were used for karyotyping (50 metaphase spreads counted). The lack of a Y chromosome was further confirmed by the absence of *Smcy* (19) as determined by genomic PCR using primers: SEQ ID NO:5 5'-TGAAGCTTTGGCTTTGAG-3' (forward) and SEQ ID NO:6 5'-CCGCTGCCAAATTCTTTGG-3' (reverse) under the following conditions: 35 cycles of 95°C for 30 seconds, 58°C for 30 seconds, 72°C for 30 seconds (Dr David Threadgill, Department of Cell Biology, Vanderbilt University, Nashville, TN; personal communications). PCR products were generated from *Smcy* (approximately 290bp) and its X-chromosomal homologue *Smcx* (approximately 330bp).

Please replace the paragraph beginning at page 36, line 8, which starts with "Embryos and frozen tissue sections were fixed and stained with 5-bromo-4-chloro-3-indolyl  $\beta$ -D-galactopyranoside" with the following replacement paragraph:

Embryos and frozen tissue sections were fixed and stained with 5-bromo-4-chloro-3-indolyl  $\beta$ -D-galactopyranoside (X-gal; Promega, Madison, WI) substrate as previously described (24). The presence of *lacZ* was detected by genomic PCR using the following primers: SEQ ID NO:7 5'-ACTATCCCGACCGCCTTACT-3' (forward) and SEQ ID NO:8 5'-TAGCGGCTGATGTTGAACTG-3' (reverse) under the following conditions: 30 cycles of 95°C for 30 seconds, 52°C for 30 seconds, 72°C for 2 minutes. The anticipated product size was 172bp.